

## Claims

### WHAT IS CLAIMED IS:

- 5 1. A wireless display device system comprising:
- (a) a wireless drawing command transmitting unit that includes:
- a master image renderer;
- a first drawing command buffer operative to store drawing
- commands for the first drawing command buffer;
- 10 a first wireless transceiver operatively coupled to the first
- drawing command buffer to transmit drawing commands
- associated with the master image renderer;
- a first frame buffer operatively coupled to the master image
- renderer;
- 15 a first display screen operatively coupled to output rendered
- images from the first frame buffer; and
- (b) a wireless drawing command receiving unit, operatively coupled to the
- drawing command transmitting unit via a wireless link, that includes:
- 20 a shadow image renderer;
- a second wireless transceiver operative to receive the
- transmitted drawing commands and to transmit drawing command throttle
- data back to the drawing command transmitting unit to throttle
- transmission of drawing commands communicated wirelessly;
- 25 a second drawing command buffer operative to store
- received drawing commands from the drawing command transmitting unit
- for use by the shadow image renderer;
- a second frame buffer operatively coupled to the shadow
- image renderer; and
- 30 a second display screen operatively coupled to output
- rendered images from the second frame buffer.

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9. The system of claim 1 wherein the master image renderer and the shadow image renderer each use different command streams and wherein the wireless drawing command transmitting unit includes a shadow command buffer and a master

command buffer and a separate shadow command requestor and master command requestor.

10. The system of claim 1 wherein the wireless drawing command transmitting unit  
5 wirelessly sends first system direct frame buffer write commands to the wireless drawing command receiving unit for writing data to the second frame buffer to facilitate a correspondence between remote and local frame buffers.

11. The system of claim 1 wherein the wireless drawing command transmitting unit  
10 wirelessly transmits the same control register data generated for the first renderer to the wireless drawing command receiving unit for the second renderer.

12. A wireless display device system comprising:

(a) a wireless drawing command transmitting unit having a wireless transmitter operatively coupled to transmit drawing commands associated with a master image renderer; and

(b) a wireless drawing command receiving unit, operatively coupled to the drawing command transmitting unit via a wireless link, that includes a wireless receiver operative to receive the transmitted drawing commands and to transmit drawing command throttle data back to the wireless drawing command transmitting unit to throttle transmission of drawing commands communicated wirelessly.

13. The system of claim 12 wherein:

the wireless drawing command transmitting unit includes a master image renderer; and a first drawing command buffer operative to store drawing commands for the first drawing command buffer; and wherein

the wireless drawing command receiving unit includes a shadow image renderer; and

a second drawing command buffer operative to store received drawing commands from the drawing command transmitting unit for use by the shadow image renderer.

14. The system of claim 12 wherein the wireless drawing command transmitting unit wirelessly sends first frame buffer write commands to the wireless drawing command receiving unit for writing data to a second frame buffer to facilitate a correspondence between remote frame buffers.

15. The system of claim 14 wherein the wireless drawing command transmitting unit wirelessly transmits the same control register data generated for the first renderer to the wireless drawing command receiving unit for the second renderer.

16. The system of claim 14 wherein the wireless drawing command transmitting unit wirelessly transmits different control register data generated for the first renderer

to the wireless drawing command receiving unit for the second renderer to facilitate independent configuration of the wireless drawing command receiving unit.

17. A wireless device comprising :

a wireless drawing command receiving unit, that includes:

a wireless transceiver operative to receive wirelessly  
transmitted drawing commands from a wireless drawing command  
transmitting unit; and

a shadow image renderer, operatively coupled to wireless  
transceiver, and operative to generate drawing command throttle  
data to transmit drawing command throttle data back to the  
wireless drawing command transmitting unit to throttle  
transmission of drawing commands communicated wirelessly.

18. The device of claim 17 further including:

a drawing command buffer, operatively coupled to the  
shadow image rendering unit, and operative to store received drawing  
commands, for use by the shadow image renderer;

a frame buffer operatively coupled to the shadow image  
renderer; and

a display screen operatively coupled to the shadow image  
renderer to output rendered images from the frame buffer.

19. A wireless device comprising:

a wireless drawing command transmitting unit having a wireless transmitter operatively coupled to transmit drawing commands associated with a master image renderer; and

5 a command requestor operatively responsive to wirelessly communicated drawing command throttle data to throttle transmission of drawing commands communicated wirelessly via the wireless transmitter.

20. The device of claim 19 including a master image renderer; and a first drawing

10 command buffer operative to store drawing commands for master image renderer.

21. The device of claim 20 wherein the wireless drawing command transmitting unit wirelessly sends first frame buffer write commands to a wireless drawing command receiving unit for writing data to a second frame buffer to facilitate a correspondence between remote frame buffers.

22. The device of claim 21 wherein the wireless drawing command transmitting unit wirelessly transmits the same control register data generated for the first renderer to a wireless drawing command receiving unit containing a second renderer.

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23. A method for providing wireless display of an image comprising:

receiving wirelessly transmitted drawing commands for use by a  
first image renderer; and

transmitting drawing command throttle data back to a wireless  
drawing command transmitting unit, to throttle transmission of drawing  
commands communicated wirelessly.

24. The method of claim 23 including the step of transmitting, via a wireless  
communication link for the first image renderer, drawing commands associated with a  
second image renderer.

25. The method of claim 24 including the step of prior to the step of receiving  
wirelessly transmitted drawing commands, storing drawing commands for the second  
image renderer; and also including the step of storing received drawing commands from  
the drawing command transmitting unit for use by the first image renderer.

26. The method of claim 25 including the step of wirelessly sending first frame buffer  
write commands to a wireless drawing command receiving unit for writing data to a  
second frame buffer to facilitate a correspondence between remote first and second  
frame buffers.

27. The method of claim 23 including the step of wirelessly receiving recompressed  
video for display.

28. The method of claim 26 including the step of wirelessly transmitting the same control  
register data generated for the first renderer to the wireless drawing command  
receiving unit for the second renderer.